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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443,262	11/22/1999	JUHA KALLIOKULJU	297-008939-U	6962

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EXAMINER	
LY, NGHI H	

ART UNIT	PAPER NUMBER
2686	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/443,262	KALLIOKULJU ET AL.	
	Examiner	Art Unit	
	Nghi H. Ly	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *10-23* is/are allowed.

6)☒ Claim(s) *1 and 5-9* is/are rejected.

7)☒ Claim(s) *2-4* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ray et al (US 6,108,539) in view of Labedz et al (US 4,654,867).

Regarding claim 1, Ray teaches a method for a mobile station for performing a handover (see column 19, lines 25-30) from a first network connection to a second network connection (also see column 19, lines 25-30) in a mobile telecommunication system providing for non-real time telecommunication connections over a radio interface

between mobile stations and the fixed parts of the mobile telecommunication system (see column 24, lines 44-62, see "facsimile transmissions, E-mail, data file and the like").

Ray does not specifically disclose comprising in the order recited the steps of:

suspending at least one active telecommunication connection between a mobile station and the fixed parts of the mobile telecommunication system,

performing a handover,

and resuming the suspended telecommunication connection.

Labedz teaches comprising in the order recited the steps of:

suspending at least one active telecommunication connection between a mobile station and the fixed parts of the mobile telecommunication system (see Abstract and column 2, lines 65-68),

performing a handover (also see Abstract and column 2, lines 65-68),

and resuming the suspended telecommunication connection (also see Abstract and column 2, lines 65-68).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to provide the teaching of Labedz into the system of Ray in order to provide protection against data loss cause by a subscriber unit handoff (see Labedz, column 2, lines 50-56).

Regarding claim 9, Ray further teaches a mobile station for communicating with the fixed parts of a mobile telecommunication system over network connections (see column 19, lines 25-30), comprising means for executing the method according to claim

1 (also see column 19, lines 25-30), in order to perform a handover from a first network connection to a second network connection (also see column 19, lines 25-30).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ray et al (US 6,108,539) in view of Labedz et al (US 4,654,867) and further in view of the Applicant's admitted prior art.

Regarding claim 5, the combination of Ray and Labedz teaches the non-real time telecommunication connections (seeRay, column 24, lines 44-62, see "facsimile transmissions, E-mail, data file and the like").

The combination of Ray and Labedz does not specifically disclose telecommunication connections are arranged according to a certain structure of protocol stacks in a mobile station, a radio access network, a serving support node of a packet-switched data transfer network and a gateway support node of a packet-switched data transfer network, and the method comprises the steps of: communicating between a number of first peer entities between the mobile station and the radio access network, and the first peer entities are composed of a physical layer, a Media Access Control layer and a Radio Link Control layer, and a Network Service layer and a protocol layer for communication between the radio access network and the packet-switched data transfer network, and a Subnetwork Dependent Control Protocol Layer which in the mobile station is immediately on top of the Radio Link Control layer and in the serving support node of a packet-switched data transfer network is immediately on top of the

protocol layer for communication between the radio access network and the packet-switched data transfer network.

The Applicant's admitted prior art teaches telecommunication connections are arranged according to a certain structure of protocol stacks in a mobile station (see fig.1 box MS), a radio access network (see Back ground of the invention page 2 lines 8-9 or Radio network controllers), a serving support node of a packet-switched data transfer network and a gateway support node of a packet-switched data transfer network (see Back ground of the invention page 2 lines 8-9), and the method comprises the steps of: communicating between a number of first peer entities between the mobile station and the radio access network (see Back ground of the invention page 1 lines 21-23) , and the first peer entities are composed of a physical layer (see Back ground of the invention page 1 lines 16-21), a Media Access Control layer (see fig.1 box 102) and a Radio Link Control layer (see fig.1 box 103), and a Network Service layer (see fig.1 box 105) and a protocol layer (see Back ground of the invention page 1 line 21-23) for communication between the radio access network and the packet-switched data transfer network, and a Subnetwork Dependent Control Protocol Layer (see fig.1 box 108) which in the mobile station is immediately on top of the Radio Link Control layer (see fig.1 box 103) and in the serving support node of a packet-switched data transfer network is immediately on top of the protocol layer for communication between the radio access network and the packet-switched data transfer network (see Back ground of the invention page 1 line 15-16). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to provide the teaching of the

admitted prior art into the system of Ray and Labedz in order to ensure a sufficient data transmission performance.

The combination of Ray, Labedz and the Applicant's admitted prior art does not specifically disclose the communicating between a number of second or third peer entities between the radio access network and the serving support node of a packet-switched data transfer network. However, such as number of peer entities would have been obvious since the particular number of peer entities could have been determined by the inventors' choice. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to select such number of peer entities so that signals could be transmitted to many entities at the same time.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ray et al (US 6,108,539) in view of Labedz et al (US 4,654,867) and further in view of the Applicant's admitted prior art and Roobol et al (US 6,307,867).

Regarding claim 6, the combination of Ray, Labedz and the Applicant's admitted prior art teaches the Radio Link Control layer (see Applicant's Background of the invention page 1, lines 18-21). The combination of Ray, Labedz and the Applicant's admitted prior art does not specifically disclose the steps of performing error detection and error-related retransmission as well as flow control between the mobile station and the radio access network.

Roobol teaches the steps of performing error detection (see column 1, line 60-63) and error-related retransmission as well as flow control between the mobile station and the radio access network (see column 5, lines 63-67).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the teaching of Roobol into the system of Ray, Labedz and the Applicant's admitted prior art in order to eliminate error during data transmission.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ray et al (US 6,108,539) in view of Labedz et al (US 4,654,867) and further in view of Roobol et al (US 6,307,867).

Regarding claim 7, the combination of Ray and Labedz teaches a first network connection and the second network connection (see Ray, column 19, lines 25-30). The combination of Ray and Labedz teaches network connections are packet-switched connections for transmitting error critical data.

Roobol teaches network connections (see column 6, lines 27-30 and see fig.7) are packet-switched connections for transmitting error critical data (see column 6, lines 47-50).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to provide the teaching of Roobol into the system of Ray and Labedz in order to increase the flexibility in the wireless transmission.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ray et al (US 6,108,539) in view of Labedz et al (US 4,654,867) and further in view of Kanerva et al (US 6,052,385).

Regarding claim 8, the combination of Ray and Labedz teaches the first network connection and the second network connection (Ray, see column 19, lines 25-30). The combination of Ray and Labedz does not specifically disclose the non-transparent circuit-switched connections. Kanerva teaches the non-transparent circuit-switched connections (see Abstract and column 11, lines 10-15).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to provide the teaching of Kanerva into the system of the combination of Ray and Labedz in order to reduce interference and power consumption (see Kanerva, Abstract).

Allowable Subject Matter

8. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 2 and 4, the Applicant's admitted prior art teaches network controller to a first serving node of a packet-switched data transmission network and the (see Applicant's Background of the invention page 2, lines 6-9). The combination of Ray and Labedz teaches the first network connection is a connection from the mobile

station and the second network connection is a connection from the mobile station via a second radio network (see Ray, column 19, lines 25-30).

The combination of the Applicant's admitted prior art, Ray and Labedz fails to teaches the step of performing a handover comprises the substeps of: exhausting through the first network connection all transmission buffers that, at the time of suspending said at least one active non-real time telecommunication connection.

Response to Arguments

9. Applicant's arguments with respect to claims 1 and 5-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (703) 605-5164. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

03/23/05

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Acting Director
TC 2600